



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,197	10/08/2003	Neng Liu	98730-000031/US	5406
30593	7590	02/03/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			BROUSSARD, COREY M	
		ART UNIT		PAPER NUMBER
				2835

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	10/680,197	LIU, NENG	
	Examiner	Art Unit	
	Corey M. Broussard	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 October 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 October 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "connecting track" and the "moving track" must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "shape of a cake" recited by the claims is vague and indefinite. How does the applicant define a cake and how is its shape applied to the claimed invention? Clarification is requested.

4. Claims 1, 11, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the limitation of "...the power supply actuation element abutting the unfastening position..." it us unclear how the element can abut a state of the apparatus. Clarification is requested.

5. Claims 11 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the "connecting track" is between "the latch position and the unfastening position" since the track is part of the apparatus and the positions are merely states of the apparatus. Clarification is requested.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 6, 7, and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al. (PN 6,122,152). With respect to claim 1, Goto teaches a compound power supply switch for notebook computers comprising: a coupling module (20) located on the display panel (4) having a latch element (functional components of 20, mostly 26, 28, and 32) and at least one elastic element (50) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (8A) located on the processor (2) at the latch position and being separated from the coupling trough at a unfastening position (see Fig. 5A, 5B, col 7 lines 22-30); a power supply control module having a power supply actuation element (56) and a power supply control circuit (the switch 56 must inherently be connected to a circuit in order to function), the power supply actuation element abutting the unfastening position and being triggered by the latch element when the latch element is located at the unfastening position (see Fig. 7B) to generate an actuating signal to activate the power supply of the processor through the power supply control circuit (col 9 lines 13-22, col 11 lines 3-5).

8. With respect to claim 2, Goto teaches wherein the latch element has a hook section (38) and an exposed actuating section (36), the hook section being coupled with the coupling trough (8A) at the latch position (see Fig. 5A).

Art Unit: 2835

9. With respect to claim 3, Goto teaches wherein the coupling trough (8A) extends in the direction of the latch position (see Fig. 7B, the trough accepts the hook into the main body 2 as the panel 4 moves in a latching direction) to form a compartment to latch the hook section (38) of the latch element.

10. With respect to claim 4, Goto teaches wherein the power supply actuation element (56) is a pushbutton power supply switch (see Fig. 7A, 7B, the switch 56 is a pushbutton switch with button 56A) to generate an electromagnetic or current pulse signal through a brief contact with the latch element (col 11, lines 3-5).

11. With respect to claim 6, Goto teaches wherein the latch element has a moving track substantially in parallel with the flat surface of the display panel (see Fig. 7A, 7B, slider 26 is in a moving track that is parallel with 8).

12. With respect to claim 7, Goto teaches wherein the latch element has a rectangular actuating section (36, see Fig. 1-3, 6) exposed outside the display panel (4) and extended in the direction of the coupling trough (8A) to form a hook section (38), and a bucking section (48) in contact with the elastic element (50).

13. With respect to claim 11, Goto teaches a compound power supply switch for notebook computers comprising: a coupling module (20) located on the display panel (4) having a latch element (functional components of 20, mostly 26, 28, and 32) and at least one elastic element (50) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (8A) located on the processor at the latch position and being separated from the coupling trough at a unfastening position (see Fig. 5A, 5B, col 7 lines 22-30), the connecting track between the latch position and

the unfastening position being substantially in parallel with the flat surface of the display panel (see Fig. 7A, 7B, slider 26 is in a moving track that is parallel with 8); and a power supply control module having a power supply actuation element (56) and a power supply control circuit (the switch 56 must inherently be connected to a circuit in order to function), the power supply actuation element abutting the unfastening position and being triggered by the latch element when the latch element is located at the unfastening position (see Fig. 7B) to generate an actuating signal to activate the power supply of the processor through the power supply control circuit (col 9 lines 13-22, col 11 lines 3-5).

14. With respect to claim 12, Goto teaches wherein the latch element has a rectangular actuating section (36, see Fig. 1-3, 6) exposed outside the display panel (4) and extended in the direction of the coupling trough (8A) to form a hook section (38), and a bucking section (48) in contact with the elastic element (50).

15. With respect to claim 13, Goto teaches wherein the coupling trough (8A) extends in the direction of the latch position (see Fig. 7B, the trough accepts the hook into the main body 2 as the panel 4 moves in a latching direction) to form a compartment to latch the hook section (38) of the latch element.

16. With respect to claim 14, Goto teaches wherein the power supply actuation element (56) is a pushbutton power supply switch (see Fig. 7A, 7B, the switch 56 is a pushbutton switch with button 56A) to generate an electromagnetic or current pulse signal through a brief contact with the latch element (col 11, lines 3-5).

17. Claims 1, 5, 10, 11, and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Koo (US Pub 2003/0011972). With respect to claim 1, Koo teaches a compound power supply switch for notebook computers comprising: a coupling module (30) located on the display panel (20) having a latch element (33) at a latch position, the latch element being engaged with a coupling trough (15) located on the processor (10) at the latch position and being separated from the coupling trough at a unfastening position ("C", see Fig 7, 8); and a power supply control module having a power supply actuation element (53) and a power supply control circuit (the switch must inherently be connected to a circuit to function), the power supply actuation element abutting the unfastening position (see Fig. 7) and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit ([0034] lines 1-3, see Fig. 5-7).

18. With respect to claim 5, Koo teaches wherein the power supply control circuit connects to a power supply input end located on the processor through the display panel (since the power supply actuation element 53 is mounted in the display panel 20, the circuit connecting it must inherently pass through the display panel into the processor 10 to actuate the power supply, [0034] lines 1-3).

19. With respect to claim 10, Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, see [0040] lines 4-6).

Art Unit: 2835

20. With respect to claim 11, Koo teaches a compound power supply switch for notebook computers comprising: a coupling module (30) located on the display panel (20) having a latch element (33) at a latch position, the latch element being engaged with a coupling trough (15) located on the processor (10) at the latch position and being separated from the coupling trough at a unfastening position ("C", see Fig 7, 8), the connecting track between the latch position and the unfastening position being substantially in parallel with the flat surface of the display panel (see Fig. 5); and a power supply control module having a power supply actuation element (53) and a power supply control circuit (the switch must inherently be connected to a circuit to function), the power supply actuation element abutting the unfastening position (see Fig. 7) and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit ([0034] lines 1-3, see Fig. 5-7).

21. With respect to claim 15, Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, see [0040] lines 4-6).

22. Claims 1, 8, 9 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung (PN 6,243,819). With respect to claim 1, Jung teaches a compound power supply switch comprising: a coupling module (see Fig. 3) located on the display panel (14) having a latch element (35) and at least one elastic element (37) to keep the latch element at a latch position, the latch element being engaged with a coupling

trough (24) located on the processor at the latch position and being separated from the coupling trough at a unfastening position; and a power supply control module (40) having a power supply actuation element (42) and a power supply control circuit (see Fig. 4), the power supply actuation element abutting the unfastening position and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit.

23. With respect to claim 8, Jung teaches wherein the latch element (35) has a moving track substantially normal to the flat surface of the display panel (see Fig. 3, the button 34 moves in a direction substantially normal to the surface of 14).

24. With respect to claim 9, Jung teaches where the latch element is formed substantially in the shape of a cake and has a hook section (35) corresponding to the coupling trough (24), and an axle strut (36) located respectively on two side thereof to couple with the elastic element to push and turn the latch element about the axle strut to the unfastening position (see Fig. 3, when the button 34 is moved in the A direction about the axle the latch assumes the unfastening position).

25. With respect to claim 16, Jung teaches a compound power supply switch comprising: a coupling module (see Fig. 3) located on the display panel (14) having a latch element (35) and at least one elastic element (37) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (24) located on the processor at the latch position and being separated from the coupling trough at a unfastening position, the connecting track between the latch position and the

unfastening position being substantially normal to the flat surface of the display panel (see Fig. 3, the button 34 moves in a direction substantially normal to the surface of 14); and a power supply control module (40) having a power supply actuation element (42) and a power supply control circuit (see Fig. 4), the power supply actuation element abutting the unfastening position and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit.

26. With respect to claim 17, Jung teaches where the latch element is formed substantially in the shape of a cake and has a hook section (35) corresponding to the coupling trough (24), and an axle strut (36) located respectively on two side thereof to couple with the elastic element to push and turn the latch element about the axle strut to the unfastening position (see Fig. 3, when the button 34 is moved in the A direction about the axle the latch assumes the unfastening position).

27. With respect to claim 18, Jung teaches the coupling trough (24) extends in the direction of the latch position to form a compartment (25) to latch the hook section of the latch element (35, see Fig. 3).

28. With respect to claim 19, Jung teaches the power supply actuation element (40) is a pushbutton power supply switch to generate an electromagnetic or current pulse signal through a brief contact with the latch element (col 5 lines 4-11).

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (PN 6,243,819) in view of Koo (US Pub 2003/0011972). Jung teaches the device as applied to claim 16 above, but lacks teaching where the coupling module is located on the processor and the coupling trough is located on the display panel. Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, see [0040] lines 4-6). It would have been obvious to a person of ordinary skill in the art to combine the compound switch of Jung with the switch orientation suggested by Koo to obtain a compound switch with the latch element on the main body for the benefit of a notebook computer where length of the power supply control circuit could be shortened, therefore reducing the materials and cost needed to produce the computer.

Conclusion

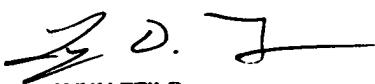
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey M. Broussard whose telephone number is 571 272 2799. The examiner can normally be reached on 7:30-5 M-F.

Art Unit: 2835

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMB
cmb


LYNN FEILD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800